Team Name: Team 8 / Auricle

Team members:
- Joshua Jenson, jjenson@ku.edu
- Jake Kennedy, jmckennedy@ku.edu
- Austin Kurtti, a285k601@ku.edu
- Tony Nguyen, kerokid@ku.edu
- Daniel Scharf, d414s911@ku.edu

Meeting Times:
- Lab: 4:00pm-5:50pm, Fri.
- Meetings with Professor: 9/23, 10/14, 11/21 @ 11:30am

Project Description:

The goal of our project will be to design, develop, and launch a mobile app (tentatively titled “Auricle”) which is capable of recording and storing audio to a continuous, fixed-length memory buffer capable of being permanently saved at the user’s discretion. Once started, the app should be able to run as a background process while the screen is locked, and while other apps are in use. The app should be optimized as much as possible to minimize its drain on battery life and performance, and should not interfere with the use of other apps.

The purpose of the app is to provide users access to an unequivocal physical record of any conversation they are a member to while requiring minimal effort and with minimal impact on their daily life. The key difference between the app and simply using a phone’s native recording app lies in the aforementioned buffer. Once at its full length, the buffer would continuously dump the oldest audio data while writing new data in its place so that the past X minutes of audio are always available. When the user wants to permanently save something recently heard, the app will then save the contents of the buffer to disk. By doing this, the app would avoid the issue of massive audio files filling up the phone’s disk space like a normal recording app would. This allows the user to run the app as often as desired with minimal effort on their part.

Project Milestones:

October 14th:
- List of features required for minimum completion, desired completion, and possible enhancements
- Investigate any potential issues that would make the proposed project incompletable (legal, technical)
- Complete outline for project proposal video with descriptions of what will be shown/said

October 24th:
- List of use/test cases to determine progress towards each stage of completion
- Project Proposal Report
- Gantt chart for minimal completion
- Project Proposal Video
November 21st:
- Create conceptual class diagrams for the entire app at each state of completion. With these diagrams completed, have the project team meet, discuss, and each choose portions they will agree to work on until approx. 1/2 of the minimal completion requirements are accounted for.

January 30th:
- Evaluate completion progress of previously selected tasks, discuss problems encountered and have available members assist in completing uncompleted tasks.
- If necessary, redesign any project modules needing changes
- Distribute remaining tasks required for minimal completion amongst members

March 13th:
- Evaluate completion progress of previously selected tasks, discuss problems encountered and have available members assist in completing uncompleted tasks.
- If necessary, redesign any project modules needing changes
- If not yet at minimal completion, determine remaining requirements and set an expected minimum completion date (MCD)

MCD:
- Be able to pass all test cases required for minimum completion.
- Complete registration required to launch app to Google Play store and create an app description page with description, logo, pictures, and warnings.

MCD + 1 week:
- Have minimally completed app available for download

Project Budget:
At this time, there are currently no anticipated costs associated with this project, however, funds may be required once we begin implementation in order to purchase Android testing devices for project members without an Android device (not sure what the lowest cost here might be, but it should only be 1 or 2 devices at the most).

Work Plan:
Work load will be divided using a Scrum-like approach consisting of several periods consisting of first determining the product requirements remaining to be completed, then having group members discuss what can/needs to be done during the next cycle and volunteer to complete different tasks based on their skillsets. After a period of time, group members will meet again and discuss their progress, problems, and offer help to team members who they may be able to assist. Once a cycle has been completed, the remaining requirements will be re-evaluated and a new cycle will begin. By allowing project members to choose their work and bounce from task to task instead of forcing certain tasks on certain members, group members will hopefully be more enthusiastic about their work, be able to apply their skillset towards problems they are best suited for, and seek help from team members when they encounter a problem they do not know how to solve.